

CLAIMS:

1. Method for differential diagnosis of autoimmune
5 diseases of the GSE-type or associated with gluten
sensitive enteropathy comprising taking a sample and
testing the sample for antibodies against human tissue
transglutaminase and at least one other
transglutaminase molecule selected from FXIIIA, TGk,
10 TGx, TGe and Band 4.2.
2. Method as claimed in claim 1, wherein the autoimmune
disease is dermatitis herpetiformis, morbus Duhring.
- 15 3. Method as claimed in claim 1, wherein the autoimmune
disease is selected from Addison's disease, AI
haemolytic anaemia, AI thrombocytopenic purpura, AI
thyroid diseases, atrophic gastritis - pernicious
anaemia, Crohn's disease, colitis ulcerosa,
20 Goodpasture syndrome, IgA nephropathy or IgA
glomerulonephritis, myasthenia gravis, partial
lipodystrophy, polymyositis, primary biliary
cirrhosis, primary sclerosing cholangitis, progressive
systemic sclerosis, recurrent pericarditis, relapsing
25 polychondritis, rheumatoid arthritis, rheumatism,
sarcoidosis, Sjögren's syndrome, SLE, splenic atrophy,
type I (insulin-dependent) diabetes mellitus, diabetis
mellitus of other types, Wegener granulomatosis,
ulcerative colitis, vasculitis (both systemic and
30 cutaneous), vitiligo.
4. Method as claimed in claim 1, wherein the autoimmune
disease is associated with infertility, increased risk
of abortion, reduced fetal growth.
- 35 5. Comparative protein binding assay for differential
diagnosis of autoimmune diseases comprising the

5 detection of antibodies against transglutaminase, characterised in that the protein binding assay comprises at least two different transglutaminase antigens selected from tissue transglutaminase (TGc), TGk, TGe, TGx, FXIIIA and Band 4.2

6. Comparative protein binding assay as claimed in claim 5, comprising transglutaminase from different species.

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7. Comparative protein binding assay as claimed in any preceding claim 5 to 6, wherein the transglutaminase antigen is a recombinant fusion protein or fragment thereof.

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8. Comparative protein binding assay as claimed in any preceding claim 5 to 7, wherein the binding assay is an immunoassay selected from RIA, EIA/ELISA, LiA and FiA.

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9. Comparative protein binding assay as claimed in any preceding claim 5 to 8, wherein the binding assay is a sandwich-immunoassay selected from IRMA, IEMA/EUA, ILMA (immunoluminescence assay) and IFMA (immuno-fluorescence assay).

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